

ATTACHMENT B
SUMMARY OF GROUND WATER MONITORING DATA
(2003 TO 2004)

CHELSEA SANDWICH, LLC
NPDES PERMIT NO. MA0003280

GeoLabs, Inc.
Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Chelsea Terminal
11 Broadway
Chelsea, MA 02150

Attn: Ashwin Patel

PROJECT ID:

EPA 40CFR 423-APP-A-TEST
Chelsea Terminal

GEOLABS CERTIFICATION #:

M-MA015

SAMPLE NUMBER:

150584

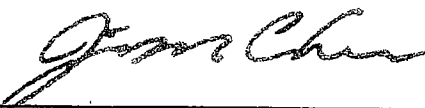
DATE PREPARED:

June 28, 2004

PREPARED BY:

Jennifer McAlpine

APPROVED BY:



Jim Chen, Laboratory Director

Location: 45 Johnson Lane
Braintree, MA 02184

Phone: (781) 848-7844
Fax: (781) 848-7811

Case Narrative

Project ID: EPA40CFR
Client Name: Chelsea Sandwich

Sample Number: 150584
Received: 06/30/04

Physical Condition of Samples

This project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

This project was accompanied by satisfactory Chain of Custody documentation. The sample container label(s) agreed with the Chain of Custody.

Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these sample(s).

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA	PROJECT ID:	EPA40CFR
SAMPLE TYPE:	WATER	REPORT DATE:	6/28/04
COLLECTION DATE:	6/14/04	ANALYZED BY:	QS/GP
REC'D BY LAB:	6/14/04	ANALYSIS DATE:	SEE BELOW
COLLECTED BY:	CLIENT	DIGESTION DATE:	SEE BELOW
PRESERVATIVE:	NITRIC ACID		

TOTAL METALS

SAMPLE NUMBER: 160684
SAMPLE LOCATION: GW/SOIL REMED SYS

	RESULTS (mg/L)	DETECTION LIMIT (mg/L)	DIGESTION DATE	ANALYSIS DATE
ANTIMONY	ND	0.05	6/15/04	6/16/04
ARSENIC	ND	0.05	6/15/04	6/16/04
BERYLLIUM	ND	0.00	6/15/04	6/16/04
CADMIUM	ND	0.01	6/15/04	6/16/04
CHROMIUM	ND	0.06	6/15/04	6/16/04
COPPER	ND	0.01	6/15/04	6/16/04
LEAD	ND	0.01	6/15/04	6/16/04
MERCURY	ND	0.00	6/29/04	6/29/04
NICKEL	ND	0.01	6/29/04	6/16/04
SELENIUM	ND	0.05	6/29/04	6/16/04
SILVER	ND	0.01	6/29/04	6/16/04
THALLIUM	ND	0.20	6/29/04	6/16/04
ZINC	ND	0.10	6/29/04	6/16/04

ND = NOT DETECTED

Method Reference:

EPA Method	3010A (1)	Metal Preparation
EPA Method	6010B (1)	Inductively Coupled Plasma
EPA Method	245.1 (2)	Manual Cold Vapor (Mercury)

- 1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1986, 3rd Edition.
- 2) U.S. EPA 1994. "Methods for the Determination of Metals in Environmental Samples", -Supplement I- EPA/600/R-94-111-May 1994.

GeoLabs, Inc.
Environmental LaboratoriesCLIENT NAME: **CHELSEA**
SAMPLE TYPE: **WATER**PROJECT ID: **EPA40CFR**
REPORT DATE: **6/28/04****METALS QC**

	Blank	Spike % Rec.	Limits
Mercury	ND	97%	80-120%
Thallium	ND	82%	80-120%
Arsenic	ND	89%	80-120%
Selenium	ND	92%	80-120%
Zinc	ND	93%	80-120%
Antimony	ND	88%	80-120%
Chromium	ND	91%	80-120%
Cadmium	ND	87%	80-120%
Lead	ND	91%	80-120%
Nickel	ND	91%	80-120%
Beryllium	ND	90%	80-120%
Copper	ND	88%	80-120%
Silver	ND	86%	80-120%

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	RP
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/16/04
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A
PRESERVATIVE:	SODIUM HYDROXIDE		

TOTAL CYANIDE

SAMPLE NUMBER	SAMPLE LOCATION	TOTAL CYANIDE (mg/L)	DETECTION LIMIT (mg/L)
------------------	--------------------	-------------------------	---------------------------

150584	GW/SOIL REMED SYS EF	ND	0.0961
--------	----------------------	----	--------

ND = NOT DETECTED

Method Reference:

EPA Method 335.2 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, EPA, EMSL, Cincinnati, Ohio 45268.

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA40CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	CG
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/17/04
COLLECTED BY:	CLIENT	EXTRACTION DATE:	06/15/04
PRESERVATIVE:	N/A		

PESTICIDES

SAMPLE NUMBER:	150584
SAMPLE LOCATION:	GW/SOIL REMD SYS EFF

	RESULTS (µg/L)	DETECTION LIMIT (µg/L)
ALDRIN	ND	0.2
a-BHC	ND	0.2
b-BHC	ND	0.2
d-BHC	ND	0.2
g-BHC	ND	0.2
CHLORDANE	ND	0.2
4,4-DDD	ND	0.2
4,4-DDE	ND	0.1
4,4-DDT	ND	0.2
DIELDRIN	ND	0.1
ENDOSULFAN I	ND	0.1
ENDOSULFAN II	ND	0.1
ENDOSULFAN SULFATE	ND	0.2
ENDRIN	ND	0.2
ENDRIN ALDEHYDE	ND	0.2
HEPTACHLOR	ND	0.2
HEPTACHLOR EPOXIDE	ND	0.2
METHOXYCHLOR	ND	0.2
TOXAPHENE	ND	0.7
Recovery: (30-150%)		Limit
TCMX Signal 1	60%	30-150%
DCBP Signal 1	72%	30-150%
TCMX Signal 2	76%	30-150%
DCBP Signal 2	88%	30-150%

ND = NOT DETECTED

Method Reference:

EPA Method 8081A (1)

- 1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Edition.

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME: **CHELSEA TERMINAL**
SAMPLE TYPE: **GROUNDWATER**
COLLECTION DATE: **06/14/04**
REC'D BY LAB: **06/14/04**
COLLECTED BY: **CLIENT**
PRESERVATIVE: **N/A**

PROJECT ID: **EPA40CFR 423**
REPORT DATE: **06/28/04**
ANALYZED BY: **CG**
ANALYSIS DATE: **06/17/04**
EXTRACTION DATE: **06/15/04**

PESTICIDE LIQUID QC

	BLANK	MDL $\mu\text{g/L}$	LCS % Rec.	% Rec.	RPD	Limit
Aldrin	ND	0.2	58	42-122	23.1	30
alpha-BHC	ND	0.2	56	37-134	26.4	30
beta-BHC	ND	0.2	58	17-147	24.2	30
gamma-BHC (indane)	ND	0.2	50	19-140	27.6	30
delta-BHC	ND	0.2	50	32-127	27.6	30
4,4-DDD	ND	0.2	54	31-141	28.6	30
4,4-DDE	ND	0.1	52	30-145	26.7	30
4,4-DDT	ND	0.2	52	25-160	32.3	30
Dieldrin	ND	0.1	56	36-146	27.7	30
Endosulfan I	ND	0.1	58	45-153	24.2	30
Endosulfan II	ND	0.1	56	0-202	27.7	30
Endosulfan sulfate	ND	0.2	56	26-144	25.0	30
Endrin	ND	0.2	58	30-147	24.2	30
Endrin aldehyde	ND	0.2	12	30-150	66.7	30
Heptachlor	ND	0.2	54	34-111	25.8	30
Heptachlorepoxyde	ND	0.2	58	37-142	26.9	30
Hexachlorobenzene	ND	0.2	64	30-150	22.2	30
Methoxychlor	ND	0.2	69	30-150	24.9	30

Surrogate (30-150%)	Blank	LCS % Recovery
TCMX SIGNAL 1	80	80%
DCBP SIGNAL 1	102	104%
TCMX SIGNAL 2	68	70%
DCBP SIGNAL 2	106	104%

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA40CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	CG
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/17/04
COLLECTED BY:	CLIENT	EXTRACTION DATE:	06/15/04
PRESERVATIVE:	N/A		

SAMPLE NUMBER: 150584
SAMPLE LOCATION: GW/SOIL REMED. SYS EFF

ND = NOT DETECTED

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Edition.

GeoLabs, Inc.
Environmental Laboratories

PCB WATER MCP QC SHEET

BLANK = ND

MDL = 0.30 µg/L

	LCS %	MS	MSD	% Rec. Limits	RPD	LIMIT
Arochlor 1221	N/A	N/A	N/A	40-140	N/A	50
Arochlor 1232	N/A	N/A	N/A	40-140	N/A	50
Arochlor 1016	65	N/A	N/A	40-140	N/A	50
Arochlor 1248	N/A	N/A	N/A	40-140	N/A	50
Arochlor 1254	N/A	N/A	N/A	40-140	N/A	50
Arochlor 1260	88	N/A	N/A	40-140	N/A	50
SURROGATE: (30-150%)	BLANK	LCS				
TCMX SIGNAL 1	56	64				
DCBP SIGNAL 1	73	88				
TCMX SIGNAL 2	56	54				
DCBP SIGNAL 2	84	82				

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	RD
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/15/04
COLLECTED BY:	CLIENT	EXTRACTION DATE:	06/15/04
PRESERVATIVE:	N/A		

SEMI-VOLATILE ORGANICS

SAMPLE NUMBER:	150584
SAMPLE LOCATION:	GW/SOIL REMED. SYS EFF

	RESULTS (µg/L)	DETECTION LIMIT (µg/L)
Acenaphthene	ND	0.500
Acenaphthylene	ND	0.250
Acetophenone	ND	0.750
Aniline	ND	2.250
Anthracene	ND	0.500
Azobenzene	ND	5.000
Benzo [a] anthracene	ND	0.500
Benzo [b] fluoranthene	ND	0.500
Benzo k] fluoranthene	ND	1.000
Benzo [ghi] perylene	ND	1.000
Benzo [a] pyrene	ND	0.200
Benzyl alcohol	ND	1.000
Bis-(2-chloroethoxy)methane	ND	0.500
Bis-(2-chloroethyl) ether	ND	0.500
Bis-(2-chloroisopropyl) ether	ND	0.750
Bis-(2-ethylhexyl)phthalate	ND	2.000
4-Bromophenyl phenyl ether	ND	0.750
Butyl benzyl phthalate	ND	1.250
Carbazole	ND	0.750
4-Chloroaniline	ND	2.500
4-Chloro-3-methylphenol	ND	0.500
2-Chloronaphthalene	ND	0.500
2-Chlorophenol	ND	0.500
4-Chlorophenyl-phenylether	ND	0.500
Chrysene	ND	0.500
Dibenz [a,h] anthracene	ND	0.500
Dibenzofuran	ND	0.500

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME: **CHELSEA TERMINAL**
SAMPLE TYPE: **GROUNDWATER**
COLLECTION DATE: **06/14/04**
REC'D BY LAB: **06/14/04**
COLLECTED BY: **CLIENT**

PROJECT ID: **EPA 40 CFR 423**
REPORT DATE: **06/28/04**
ANALYZED BY: **RD**
ANALYSIS DATE: **06/15/04**
EXTRACTION DATE: **06/15/04**

SEMI-VOLATILE ORGANICS

SAMPLE NUMBER: **150584**
SAMPLE LOCATION: **GW/SOIL REMED. SYS EFF**

	RESULTS (µg/L)	DETECTION LIMIT (µg/L)
1,2-Dichlorobenzene	ND	1.000
1,3-Dichlorobenzene	ND	1.000
1,4-Dichlorobenzene	ND	1.000
3,3'-dichlorobenzidine	ND	2.500
2,4-Dichlorophenol	ND	0.500
Diethyl phthalate	ND	1.250
2,4-Dimethylphenol	ND	3.750
Dimethylphthalate	ND	1.750
Di-n-butylphthalate	ND	0.750
Di-n-octyl phthalate	ND	2.000
1,2-Dinitrobenzene	ND	5.000
1,3-Dinitrobenzene	ND	0.750
1,4-Dinitrobenzene	ND	5.000
4,6-Dinitro-2-methylphenol	ND	1.000
2,4-Dinitrophenol	ND	0.250
2,4-Dinitrotoluene	ND	0.500
2,6-Dinitrotoluene	ND	0.250
Fluoranthene	ND	0.500
Fluorene	ND	0.500
Hexachlorobenzene	ND	1.000
Hexachlorobutadiene	ND	0.500
Hexachlorocyclopentadiene	ND	10.000
Hexachloroethane	ND	2.000
Indeno [1,2,3-cd] pyrene	ND	0.500
Isophorone	ND	0.500
2-Methylnaphthalene	ND	0.750
2-Methylphenol	ND	1.000
3-Methylphenol/4-methylphenol	ND	1.500

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	RD
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/15/04
COLLECTED BY:	CLIENT	EXTRACTION DATE:	06/15/04

SEMI-VOLATILE ORGANICS

SAMPLE NUMBER:	150584
SAMPLE LOCATION:	GW/SOIL REMED. SYS EFF

	RESULTS (µg/L)	DETECTION LIMIT (µg/L)
Naphthalene	ND	0.750
2-Nitroaniline	ND	0.750
3-Nitroaniline	ND	1.500
4-Nitroaniline	ND	1.000
Nitrobenzene	ND	0.750
2-Nitrophenol	ND	0.500
4-Nitrophenol	ND	0.500
N-Nitrosodimethylamine	ND	1.000
N-Nitrosodiphenylamine	ND	5.000
N-nitroso-di-n-propylamine	ND	1.000
Pentachlorophenol	ND	1.000
Phenanthrene	ND	0.500
Phenol	ND	0.250
Pyrene	ND	1.250
Pyridine	ND	1.250
2,3,4,6-Tetrachlorophenol	ND	1.000
1,2,4-Trichlorobenzene	ND	0.750
2,4,5-Trichlorophenol	ND	0.750
2,4,6-Trichlorophenol	ND	0.500
Surrogate Recoveries		
2-Fluorophenol	43%	
Phenol-d6	35%	
Nitrobenzene-d5	52%	
2-Fluorobiphenyl	51%	
2,4,6-Tribromophenol	90%	
Terphenyl-d14	94%	

ND = NOT DETECTED

CALCULATIONS BASED ON DRY WEIGHT

Method Reference:

EPA Method 8270C (1)

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Ed.

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	RD
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/15/04
COLLECTED BY:	CLIENT	EXTRACTION DATE:	06/15/04

SEMI-VOLATILE ORGANICS - QC

	Blank	Spike % Rec.	Limits
Phenol	ND	38%	30-130%
2-chlorophenol	ND	68%	30-130%
1,4-Dichlorobenzene	ND	52%	40-140%
N-Nitroso-di-n-propylamine	ND	67%	40-140%
1,2,4-Trichlorobenzene	ND	56%	40-140%
4-Chloro-3-methylphenol	ND	92%	30-130%
Acenaphthene	ND	74%	40-140%
4-Nitrophenol	ND	55%	30-130%
2,4-Dinitrotoluene	ND	53%	40-140%
Pentachlorophenol	ND	98%	30-130%
Pyrene	ND	109%	40-140%

Surrogate Recoveries:	% Rec.	% Rec.	Limits
2-Fluorophenol	45%	49%	30-130%
Phenol-d6	32%	38%	30-130%
Nitrobenzene-d5	52%	57%	30-130%
2-Fluorobiphenyl	57%	62%	30-130%
2,4,6-Tribromophenol	94%	107%	30-130%
Terphenyl-d14	96%	98%	30-130%

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	MA CT 008
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/24/04
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A
PRESERVATIVE:	SULFURIC ACID		

PHENOLS

SAMPLE NUMBER	SAMPLE LOCATION	PHENOLS (mg/L)	DETECTION LIMIT (mg/L)
150584	GW/SOIL REMED.SYS EFF	ND	0.030

ND = NOT DETECTED

Method Reference:

EPA Method 420.1 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes." EPA-600/4-79-020, EPA, EMSL, Cincinnati, Ohio 45268.

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	ZYZ
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/15/04
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A
PRESERVATIVE:	HYDROCHLORIC ACID		

VOLATILE ORGANICS

SAMPLE NUMBER: 150584
SAMPLE LOCATION: GW/SOIL REMED SYS EFF

	RESULTS	DETECTION LIMIT
	(µg/L)	(µg/L)
Acetone	ND	50.0
Acrylonitrile	ND	50.0
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	2.0
Bromoform	ND	5.0
Bromomethane	ND	2.00
2-Butanone	ND	10.0
n-Butylbenzene	ND	5.0
Carbon Tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	ND	5.0
2-Chloroethylvinylether	ND	5.0
Chloroform	ND	5.0
Chloromethane	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
Dibromomethane	ND	5.0
Dibromochloromethane	ND	5.0
Dichlorobromomethane	ND	5.0
Dichlorodifluoromethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	0.96
1,1-Dichloropropene	ND	0.4
1,2-Dibromoethane	ND	1.00
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
c-1,2-Dichloroethene	ND	5.0
c-1,3-Dichloropropene	ND	0.65
t-1,2-Dichloroethene	ND	5.0
t-1,3-Dichloropropene	ND	0.95
Ethylbenzene	ND	5.0
Hexachlorobutadiene	ND	0.50

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME:	CHELSEA TERMINAL	PROJECT ID:	EPA 40 CFR 423
SAMPLE TYPE:	GROUNDWATER	REPORT DATE:	06/28/04
COLLECTION DATE:	06/14/04	ANALYZED BY:	ZYZ
REC'D BY LAB:	06/14/04	ANALYSIS DATE:	06/15/04
COLLECTED BY:	CLIENT	DIGESTION DATE:	N/A
PRESERVATIVE:	HYDROCHLORIC ACID		

VOLATILE ORGANICS

SAMPLE NUMBER:	150584
SAMPLE LOCATION:	GW/SOIL REMED SYS EFF

	RESULTS (µg/L)	DETECTION LIMIT (µg/L)
2-Hexanone	ND	10.0
Isopropylbenzene	ND	5.0
p-Isopropyltoluene	ND	5.0
Methylene Chloride	ND	10.0
4-Methyl-2-pentanone	ND	5.0
Methyl tert-butyl ether	ND	5.0
Naphthalene	ND	20.0
n-propylbenzene	ND	5.0
Sec-butylbenzene	ND	5.0
Styrene	ND	5.0
tert-butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	0.61
1,1,1,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
Vinyl Chloride	ND	2.0
Xylenes	ND	5.0

Surrogate Recoveries:

dibromofluoromethane	96%
1,2-Dichloroethane	83%
toluene-d8	102%
BFB	94%

ND = NOT DETECTED

Method Reference:

EPA Method 8260B (1) GC/MS

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Ed.

GeoLabs, Inc.
Environmental Laboratories

BLANK ND

06/15/04

VOLATILE ORGANICS LCS

%RECOVERY

Dichlorodifluoromethane	86%	1,1,2-Trichloroethane	107%
Chloromethane	98%	Tetrachloroethene	109%
Vinyl chloride	97%	1,3-Dichloropropane	107%
Bromomethane	125%	2-Hexanone	99%
Chloroethane	113%	Dibromochloromethane	94%
Trichlorofluoromethane	98%	EDB	105%
Acrolein	91%	Chlorobenzene	111%
1,1-Dichloroethene	99%	1,1,1,2-tetrachloroethane	101%
Acetone	87%	Ethylbenzene	106%
Carbon Disulfide	101%	m,p-Xylene	110%
Methylene chloride	113%	o-xylene	108%
Acrylonitrile	109%	Styrene	114%
trans-1,2-Dichloroethene	89%	Bromoform	90%
MTBE	100%	Isopropylbenzene	112%
1,1-Dichloroethane	99%	Bromobenzene	110%
2-Butanone	108%	1,1,2,2-Tetrachloroethane	113%
Carbon tetrachloride	86%	1,2,3-Trichloropropane	112%
2,2-Dichloropropane	94%	N-propylbenzene	114%
c-1,2-dichloroethene	88%	2-Chlorotoluene	113%
Bromochloromethane	98%	4-Chlorotoluene	113%
Chloroform	95%	1,3,5-Trimethylbenzene	106%
1,1,1-Trichloroethane	89%	tert-Butylbenzene	104%
1,1-dichloropropene	105%	1,2,4-Trimethylbenzene	107%
Benzene	103%	sec-Butylbenzene	113%
1,2-Dichloroethane	102%	1,3-Dichlorobenzene	110%
Trichloroethene	96%	1,4-Dichlorobenzene	109%
1,2-Dichloropropane	102%	p-Isopropyltoluene	111%
Dibromomethane	80%	1,2-Dichlorobenzene	112%
Bromodichloromethane	92%	N-Butylbenzene	107%
2-Chloroethylvinyl Ether	80%	1,2-dibromo-3-chloropropane	102%
c-1,3-Dichloropropene	98%	1,2,4-trichlorobenzene	103%
Toluene	106%	Hexachlorobutadiene	115%
t-1,3-Dichloropropene	98%	Naphthalene	95%
		1,2,3-Trichlorobenzene	106%

MCP Limits 70%-130%

The majority of recoveries must fall within this range.

**GEOLABS, INC.
45 JOHNSON LANE
BRAINTREE, MA 02184
M-MA015**

LIMITATIONS & EXCLUSIONS

All the professional opinions presented in this report are based solely on the scope of work conducted and sources referred to in our report. The data presented by GeoLabs in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report represents the conditions, locations and materials that were observed at the time the work was conducted. No inferences regarding other conditions, locations or materials, at a later or earlier time may be made based on the contents of the report. No other warranty, express or implied is made.

This report was prepared for the sole use of our client. Portions of the report may not be used independent of the entire report.

All analyses were performed within required holding times, in accordance with EPA protocols and using accepted QA/QC procedures. All QA/QC meets acceptable limits unless otherwise noted. The information contained in this report is, to the best of my knowledge, accurate and complete.

Any and all subsequent pages of this report are chain(s) of custody.

GeoLabs, Inc.
Environmental Laboratories
 45 Johnson Lane
 Braintree, MA 02184
 Phone: 781-848-7844
 Fax: 781-848-7811

Turnaround Time
RUSH: 24hrs ☐ 48hrs ☐ 72hrs ☐
STANDARD: 5 Days ☒
 Rush Approved By: _____

Page ____ of ____

SPECIAL INSTRUCTIONS

*NOTE: Please provide all
 QA/QC data
 Thank you.*

Client: Chelsea Terminal
Address: 11 BROADWAY
Chelsea, MA 02150
Phone: 617 660 1117
Fax: 617 660 1140
Contact: ASHWIN PATEL
E-mail: _____

Project Number: EPA 40CFR423-APP-A-Test
Project Location: Chelsea Terminal
Purchase Order #: Verbal
Collected By: ASHWIN PATEL

rec'd conc

ANALYSES REQUESTED

SAMPLE ID	COLLECTION			SAMPLE LOCATION	CONTAINER		M A T R I X	C O M P	G R A B	P R E S	GEOLABS SAMPLE NUMBER	Metals	CN	Pesticides	PCBs	8270	Phenols	VOCs	TEMPERATURE	LAB PH
	D A T E	T I M E	S A M P L E D B Y		T Y P E	Q U A N T														
61104/Metals	6/14/04	9:20 PM	AP	GW/soil Remed Sys. Exp.	P	1	GW		✓	2		✓							70	
61104/CN	"	"	"	"	Effluent P	1	"		✓	5			✓							
61104/Pest	"	"	"	"	A	2	"		✓	4				✓						
61104/PCBs	"	"	"	"	"	"	"		✓	4					✓					
61104/8270	"	"	"	"	"	"	"		✓	4						✓				
61104/Phenols	"	"	"	"	"	1	"		✓	3							✓			
61104/VOCs	"	"	"	"	✓	2	"		✓	1								✓		

CONTAINER CODES:
 A = Amber
 B = Bag
 G = Glass
 P = Plastic
 S = Summa Canister
 O = Other V = VOA

MATRIX CODES:
 GW = Ground Water
 WW = Wastewater
 DW = Drinking Water
 SL = Sludge
 S = Soil A = Air
 O = Oil OT = Other

PRESERVATIVE CODES:
 1 = HCl 7 = ICE
 2 = HNO₃
 3 = H₂SO₄
 4 = Na₂S₂O₃
 5 = NaOH
 6 = MeOH

Relinquished By: [Signature] **Date/Time:** 6/14/04
Relinquished By: [Signature] **Date/Time:** 6-14-04 3:53
Relinquished By: _____

Received By: [Signature] **Date/Time:** 6-14-04
Received By: _____ **Date/Time:** 3:50
Received By GeoLabs: ISSS **Date/Time:** 6-14-04

GEOLABS CHAIN OF CUSTODY

Date: July 12, 2004

Ms. Linda M. Murphy, Director
Office of Ecosystem Protection
EPA – Region 1
One Congress Street, Suite 1100
Boston, MA 02114-2023

Mr. Neil Handler, Project Manager
Office of Ecosystem Protection
EPA – Region 1
One Congress Street, Suite 1100
Boston, MA 02114-2023

Re: Chelsea Terminal – NPDES Permit No. MA0003280
Responses to the EPA Information Request dated June 9, 2004

Dear Ms. Murphy and Mr. Handler:

In response to the subject information request,
attached are:

1. Analytical results for the metals you requested (Attachment 1). Inadvertently, the laboratory missed to fax pages 3 and 4 of the report.
2. Sample collection method is discussed in the attachment 2.

Should you have further questions concerning the
above matter, please call me 617-660-1117

Sincerely,

Ashwin Patel
Manager – Environmental Compliance

Cc File

GeoLabs, Inc.
Environmental Laboratories

ATTACHMENT 1

CLIENT NAME:	CHELSEA	PROJECT ID:	EPA40CFR
SAMPLE TYPE:	WATER	REPORT DATE:	6/28/04
COLLECTION DATE:	6/14/04	ANALYZED BY:	QS/GP
REC'D BY LAB:	6/14/04	ANALYSIS DATE:	SEE BELOW
COLLECTED BY:	CLIENT	DIGESTION DATE:	SEE BELOW
PRESERVATIVE:	NITRIC ACID		

TOTAL METALS

SAMPLE NUMBER: 160684
SAMPLE LOCATION: GW/SOIL REMED SYS

	RESULTS (mg/L)	DETECTION LIMIT (mg/L)	DIGESTION DATE	ANALYSIS DATE
ANTIMONY	ND	0.05	6/15/04	6/16/04
ARSENIC	ND	0.05	6/15/04	6/16/04
BERYLLIUM	ND	0.00	6/15/04	6/16/04
CADMIUM	ND	0.01	6/16/04	6/16/04
CHROMIUM	ND	0.06	6/15/04	6/16/04
COPPER	ND	0.01	6/15/04	6/16/04
LEAD	ND	0.01	6/15/04	6/16/04
MERCURY	ND	0.00	6/29/04	6/29/04
NICKEL	ND	0.01	6/29/04	6/16/04
SELENIUM	ND	0.06	6/29/04	6/16/04
SILVER	ND	0.01	6/29/04	6/16/04
THALLIUM	ND	0.20	6/29/04	6/16/04
ZINC	ND	0.10	6/29/04	6/16/04

ND = NOT DETECTED

Method Reference:

EPA Method 3010A (1) Metal Preparation
EPA Method 6010B (1) Inductively Coupled Plasma
EPA Method 245.1 (2) Manual Cold Vapor (Mercury)

- 1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1986, 3rd Edition.
- 2) U.S. EPA 1994, "Methods for the Determination of Metals in Environmental Samples", -Supplement I- EPA/600/R-94-111-May 1994.

GeoLabs, Inc.
Environmental LaboratoriesCLIENT NAME: **CHELSEA**
SAMPLE TYPE: **WATER**PROJECT ID: **EPA40CFR**
REPORT DATE: **6/28/04****METALS QC**

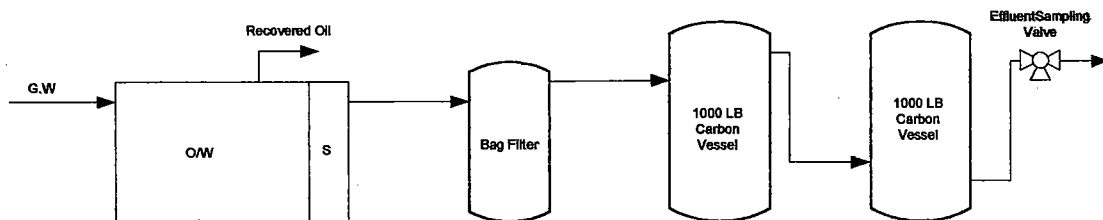
	Blank	Spike % Rec.	Limits
Mercury	ND	97%	80-120%
Thallium	ND	82%	80-120%
Arsenic	ND	89%	80-120%
Selenium	ND	92%	80-120%
Zinc	ND	93%	80-120%
Antimony	ND	88%	80-120%
Chromium	ND	91%	80-120%
Cadmium	ND	87%	80-120%
Lead	ND	91%	80-120%
Nickel	ND	91%	80-120%
Beryllium	ND	90%	80-120%
Copper	ND	88%	80-120%
Silver	ND	86%	80-120%

Chelsea Terminal
NPDES Permit # MA 0003280

Attachment 2

The groundwater and soil remediation system operates continuously however it poses during the time when the water table is fully depressed until recovered. Thus, effluent flow is continuously except times when ground water wells are being recharged. Effluent samples are collected when the system is in continuous operational mode. Effluent samples are collected after 24 hours when the system is restarted after maintenance or downtime.

Sampling Point. The effluent sampling point is located after the last carbon vessel where the treated water exits the treatment system



Samples are grabbed directly into the containers (including vials) provided by the laboratory. The containers are pre labeled and properly marked and contain preservative when necessary. Collected samples are immediately stored in a refrigerator until picked up by a carrier

Shelsea
Sandwich LLC
11 Broadway
Chelsea, MA 02150

Chelsea terminal
11 Braodway - Chelsea
NPDES Permit # 0003280
Responses to the EPA information
Request dated May 19, 2004

RECEIVED

JUL 08 2004

NPDES PERMIT UNIT

Date: July 1, 2004

Ms. Linda M. Murphy, Director
Office of Ecosystem Protection
EPA – Region 1
One Congress Street, Suite 1100
Boston, MA 02114-2023

Mr. Neil Handler, Project Manager
Office of Ecosystem Protection
EPA – Region 1
One Congress Street, Suite 1100
Boston, MA 02114-2023

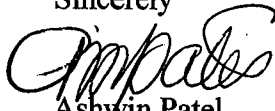
Re: Chelsea Terminal – NPDES Permit No. MA0003280
Responses to the EPA Information Request dated May 19, 2004
IR # 3 (10) Groundwater Treatment System Effluent Quality:

Dear Ms. Murphy and Mr. Handler:

Pursuant to the EPA request, the groundwater treatment system's effluent samples were obtained on June 14, 2004 and analyzed for the EPA 40CFR 423, Appendix A listed priority pollutants. The samples were submitted to the GeoLab of Braintree (Massachusetts Certification # M-MA015) for analytical work. The laboratory report is attached.

Should you have further questions concerning the above matter, please call me 617-660-1117

Sincerely



Ashwin Patel
Manager – Environmental Compliance

Cc File